

SYSTEMS AND METHODS FOR DECODING OF SYSTEMATIC FORWARD ERROR CORRECTION (FEC) CODES OF SELECTED DATA IN A VIDEO BITSTREAM

Abstract of the Disclosure

The invention is related to methods and apparatus that advantageously reconstruct and decode video data, such as video object planes (VOPs), using forward error correction (FEC) codes embedded in the video bitstream. Advantageously, the original video data can be recovered even when portions of the video bitstream are corrupted or lost during transmission. Further advantageously, the methods and apparatus disclosed are backward compatible with video bitstreams that are compliant with standard syntax, thereby allowing a decoder to achieve compatibility with both standard video bitstreams and video bitstreams embedded with FEC codes. In one embodiment, a decoder retrieves the FEC codes from a user data video packet. To save bandwidth, an encoder can provide FEC codes corresponding to a subset of the video data, and the decoder can receive and interpret indications as to which data the provided FEC codes correspond.